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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/848,734	(	05/19/2004	Richard A. Armell	112,835	7329	
21002	7590	03/28/2006		EXAMINER		
WILLIAM 1320 CENTE		≎T	STEPHENSON, DANIEL P			
SUITE 300	CE STREI	51	ART UNIT	PAPER NUMBER		
NEWTON,	MA 024:	59	•	3672		

DATE MAILED: 03/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Applicati	ion No.	Applicant(s)	Applicant(s)				
	Office Antique Comments	10/848,7	34	ARMELL, RICHA	ARMELL, RICHARD A.				
Office Action Summary			r	Art Unit					
			Stephenson	3672					
Period fo	The MAILING DATE of this communica or Reply	ition appears on th	e cover sheet wit	h the correspondence a	ddress				
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAIL as a said about the provisions of 3 SIX (6) MONTHS from the mailing date of this community period for reply is specified above, the maximum statute re to reply within the set or extended period for reply will reply received by the Office later than three months after ed patent term adjustment. See 37 CFR 1.704(b).	LING DATE OF TI 37 CFR 1.136(a). In no ex cation. ory period will apply and v , by statute, cause the app	HIS COMMUNIC yent, however, may a re vill expire SIX (6) MONT plication to become ABA	ATION. ply be timely filed  HS from the mailing date of this of the condition of the condit	•				
Status	•								
1)	Responsive to communication(s) filed	on .							
'-	·	This action is r	non-final.						
3)	Since this application is in condition for	r allowance except	t for formal matte	rs, prosecution as to the	e merits is				
. —	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
4)🖂	Claim(s) 1-19 is/are pending in the app	olication.							
-	4a) Of the above claim(s) is/are withdrawn from consideration.								
5)	Claim(s) is/are allowed.								
6)🖂	Claim(s) <u>1-9,11 and 15</u> is/are rejected.								
7)🖂	Claim(s) <u>10,12-14 and 16-19</u> is/are objected to.								
8)□	Claim(s) are subject to restriction and/or election requirement.								
Applicati	ion Papers								
9)	The specification is objected to by the E	Examiner.							
′=	The drawing(s) filed on 19 May 2004 is		ed or b)⊠ object	ed to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).									
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.									
Priority ι	ınder 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) ☐ All b) ☐ Some * c) ☒ None of:  1. ☒ Certified copies of the priority documents have been received.									
	<ul> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ul>								
* See the attached detailed Office action for a list of the certified copies not received.									
Attachmen	t(s)								
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date									
3) Infor	e of Draftsperson's Patent Drawing Review (PTO mation Disclosure Statement(s) (PTO-1449 or PT r No(s)/Mail Date			formal Patent Application (PT	O-152)				

Application/Control Number: 10/848,734

Art Unit: 3672

#### **DETAILED ACTION**

Page 2

#### **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the cascade of intensifiers must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Application/Control Number: 10/848,734

Art Unit: 3672

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Page 3

- 3. Claims 1-9, 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Murer et al. (Fig. 1 and 2) discloses an expandable centralizer. It has a body that is connected to a work string. The body has a first portion that is cylindrical in shape. It has a second portion that is substantially triangular in shape, with a set of 3 faces. Pivoting against these faces is a number of centralizers (2). The centralizers are actuated by contact with a piston (8) powered through an intensifier (13). The centralizers move between a first and a variable second position based on the fluid pressure acting on the piston. The faces are identically arranged around the body. The intensifier has a first face perpendicular to the bore. The surface area of the face is greater then the operating area of the piston.
- 4. Claims 1-9, 11 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Pittard et al. Pittard et al. (Fig. 1, 3 and 4) discloses an expandable centralizer. It has a body that is connected to a work string. The body has a first portion that is cylindrical in shape. It has a second portion that is substantially triangular in shape, with a set of 3 faces. Pivoting against these faces is a number of centralizers (23). The centralizers are actuated by contact with a piston (45) powered through an intensifier (37). The centralizers move between a first and a variable second position based on the fluid pressure acting on the piston. The faces are identically arranged around the body. The intensifier has a first face perpendicular to the bore. The surface area of the face is greater then the operating area of the piston.
- 5. Claims 1-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanford. Sanford (Fig. 1 and 2) discloses an expandable centralizer. It has a body that is connected to a work string. The body has a first portion that is cylindrical in shape. It has a second portion that

Art Unit: 3672

is substantially triangular in shape, with a set of 3 faces. Pivoting against these faces is a number of centralizers (32). The centralizers are actuated by contact with a piston (18). The centralizers move between a first and a variable second position based on the fluid pressure acting on the piston. The faces are identically arranged around the body.

6. Claims 1-7 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kinley et al. (Fig. 5E, 5F, 10, 10A and 10D) discloses an expandable centralizer. It has a body that is connected to a work string. The body has a first portion that is cylindrical in shape. It has a second portion that is polyhedral in shape, with a set of 6 faces. Pivoting against three of the faces are centralizers (31,32,40). The centralizers are actuated by contact with a piston (227). The centralizers move between a first and a variable second position based on the fluid pressure acting on the piston. The faces are identically arranged around the body.

## Allowable Subject Matter

7. Claims 10, 12-14 and 16-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Emanuel et al., Johnson, Garrison, Turzillo, Brown, Furse et al., Boe, Davis et al. and the pre-grant publications to Vandrentham Susman et al. and Eppink all show similar elements to the present invention.

Application/Control Number: 10/848,734 Page 5

Art Unit: 3672

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Supervisory Patent Examiner

Art Unit 3672

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